

FATALITY ANALYSIS OF NATIVE HAWAIIANS IN THE STATE OF HAWAII, 2007-2016



Kishor Bhatta
Dr. Panos D. Prevedouros

Department of Civil and Environmental Engineering
University of Hawaii at Manoa





PRESENTATION OUTLINE

- 1. INTRODUCTION
- 2. FATALITY ANALYSIS BASED ON ALCOHOL USE
- 3. FATALITY ANALYSIS BASED ON SPEEDING
- 4. FATALITY ANALYSIS BASED ON NON-USAGE OF RESTRAINT
- 5. MAJOR FINDINGS
- 6. **RECOMMENDATIONS**

INTRODUCTION







Year	Total Population	NH Population	VMT (Million)
2007	1,315,675	253,283	10,260
2008	1,332,213	242,423	10,189
2009	1,346,717	259,866	10,095
2010	1,363,950	275,721	10,111
2011	1,378,251	296,383	10,654
2012	1,392,766	296,592	11,518
2013	1,419,561	298,385	12,078
2014	1,408,987	295,409	10,173
2015	1,431,603	309,904	11,130
2016	1,428,557	302,926	11,132
Change (%)	8.6	19.6	8.5

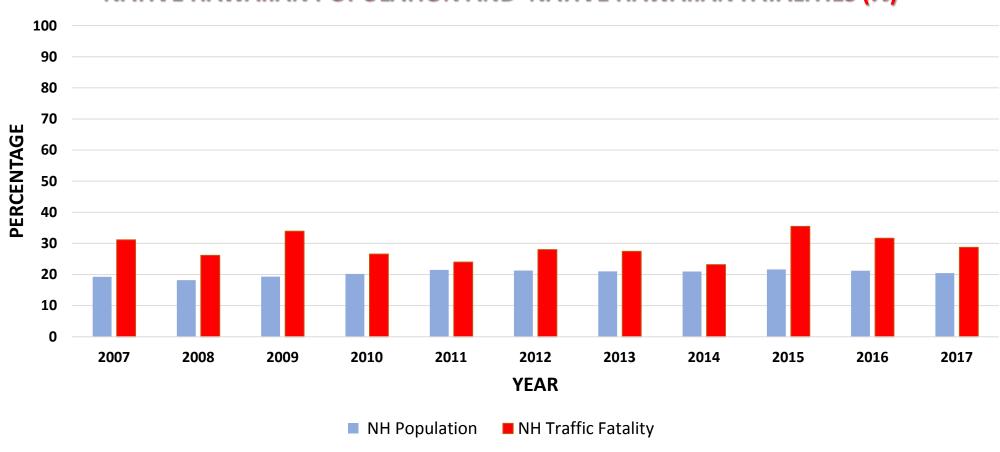
Source: http://www.ohadatabook.com/ACS.html

https://dashboard.hawaii.gov/stat/goals/5xhf-begg/ezet-axai/f4ic-3axz





NATIVE HAWAIIAN POPULATION AND NATIVE HAWAIIAN FATALITIES (%)



Source: http://www.ohadatabook.com/ACS.html





DATA SOURCE



U.S. Department of Transportation

National Highway Traffic Safety Administration



Fatality Analysis Reporting System (FARS)

- ✓ FARS is a census of fatal motor vehicle crashes with a set of data files documenting all qualifying fatalities that occurred within the 50 States, the District of Columbia, and Puerto Rico since 1975
- ✓ FARS is directed by the National Center for Statistics and Analysis (NCSA), which is a component of NHTSA
- ✓ FARS data are obtained from various States' documents, such as:
 - Police Crash Reports
 - Death Certificates
 - Coroner/Medical Examiner Reports
 - State Driver Licensing Files
 - State Highway Department Data



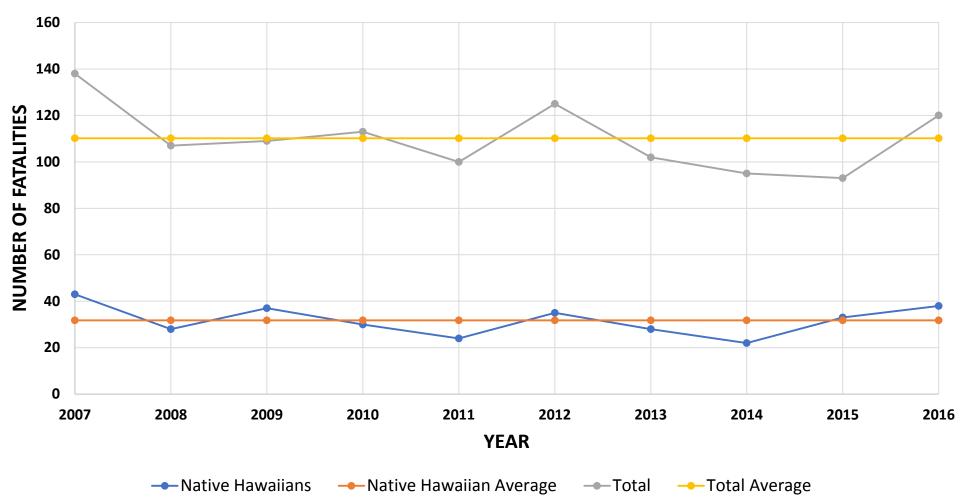


TRAFFIC FATALITY ANALYSIS



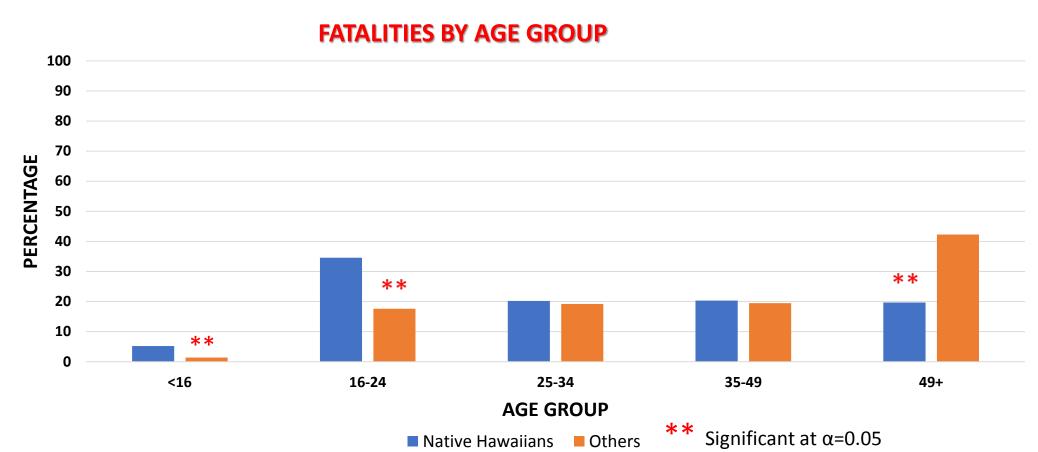


FATALITIES HAWAII







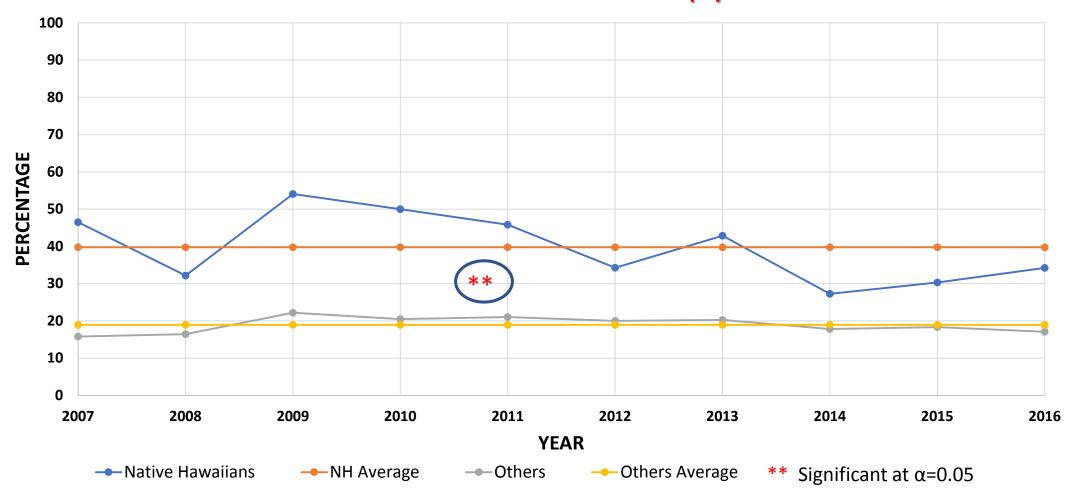


40% of Native Hawaiian fatalities are below the age of 25 whereas its only 19% among all Others





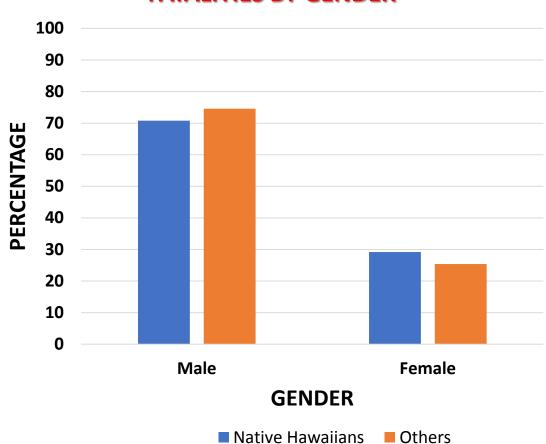
FATALITIES YOUNGER THAN 25 (%)



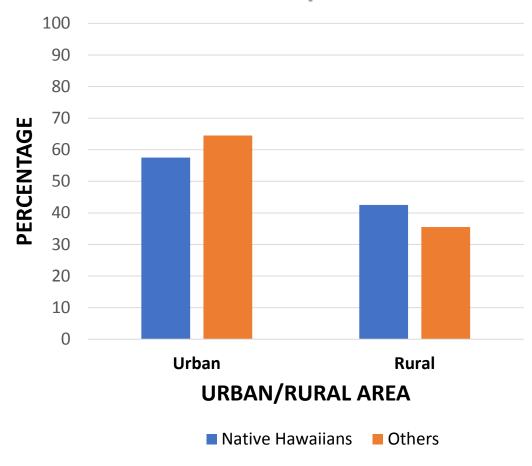








FATALITIES BY URBAN/RURAL AREA





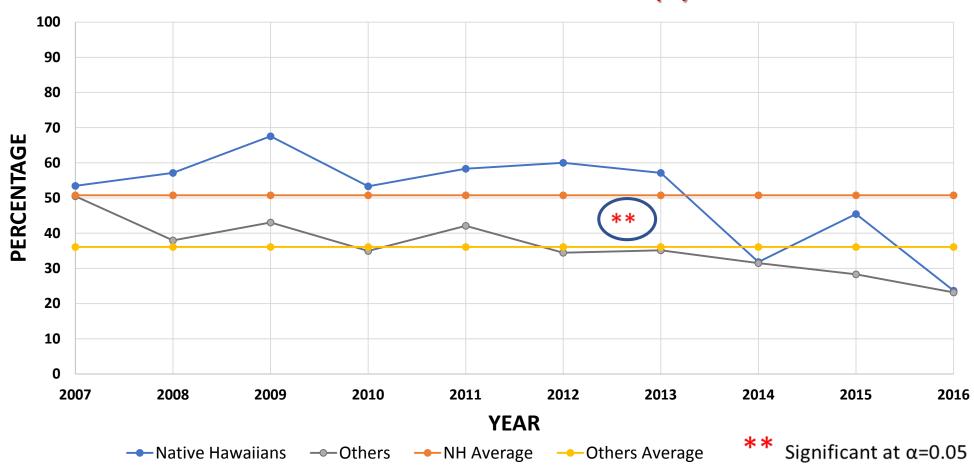


FATALITY ANALYSIS BASED ON ALCOHOL USE





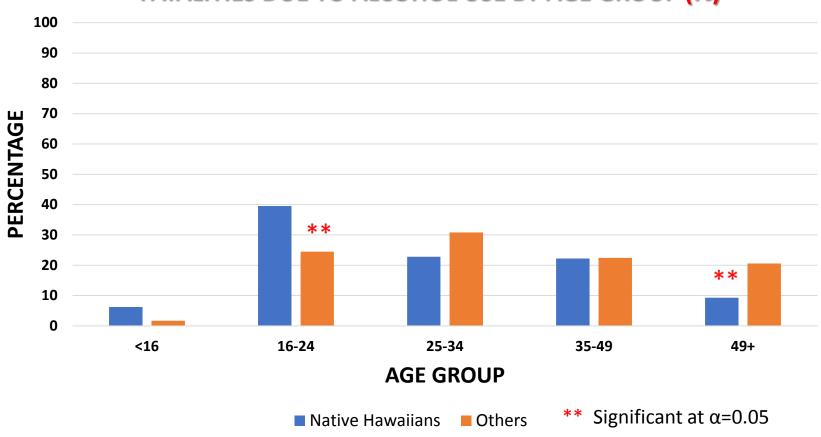
FATALITIES DUE TO ALCOHOL USE (%)







FATALITIES DUE TO ALCOHOL USE BY AGE GROUP (%)

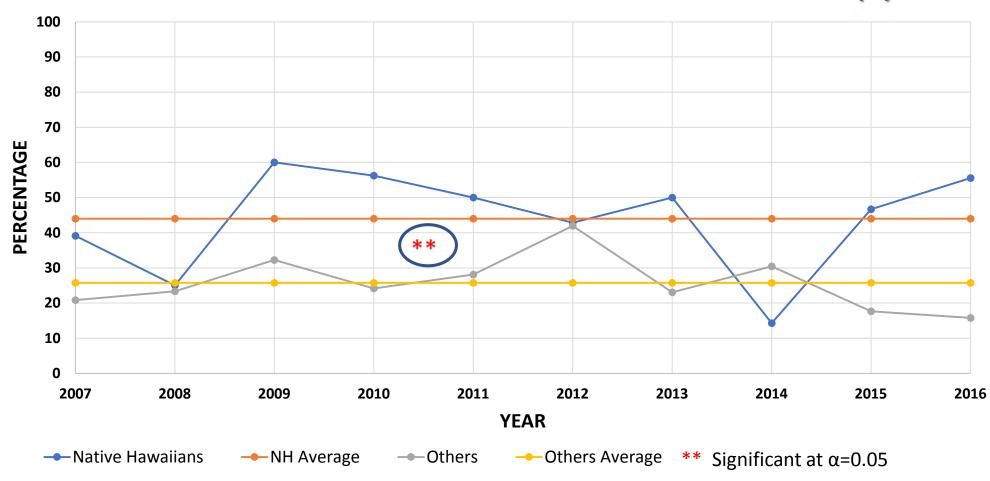


Among the alcohol impaired fatalities in Hawaii, 46% NH are younger than 25 whereas in other races its only 26%.





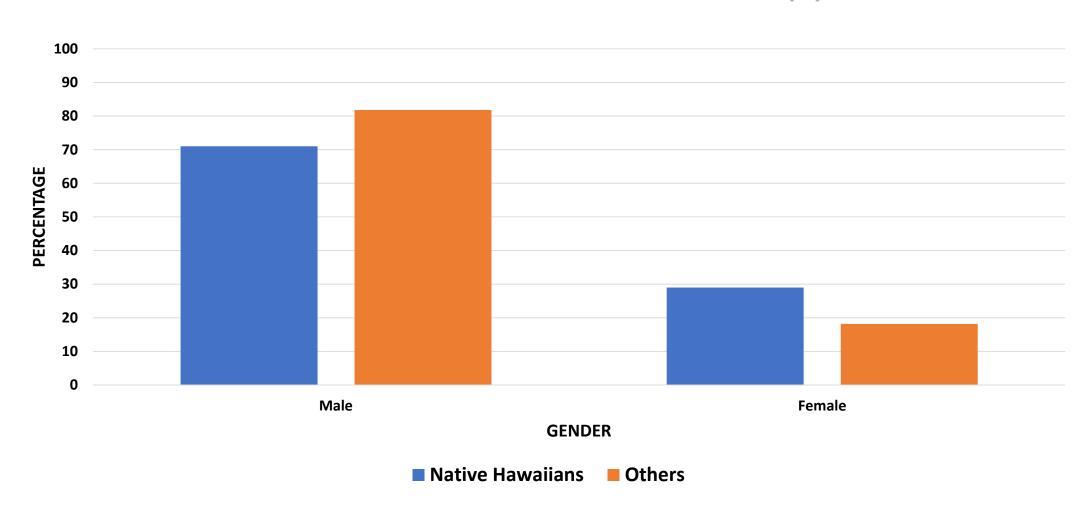
FATALITIES DUE TO ALCOHOL USE YOUNGER THAN 25 YEARS OF AGE (%)



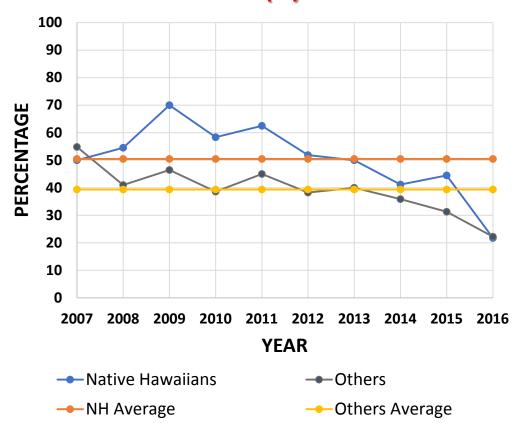




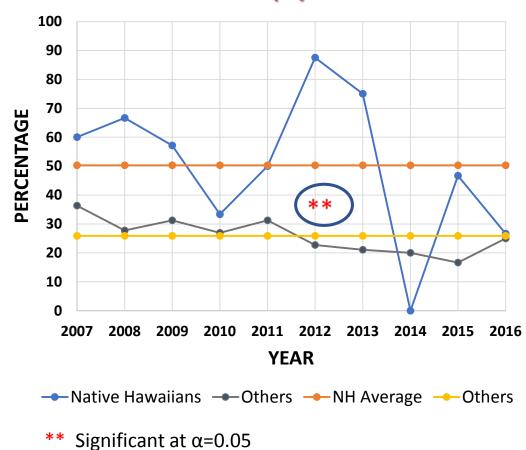
FATALITIES DUE TO ALCOHOL USE BY GENDER (%)



MALE FATALITIES DUE TO ALCOHOL USE (%)



FEMALE FATALITIES DUE TO ALCOHOL USE (%)





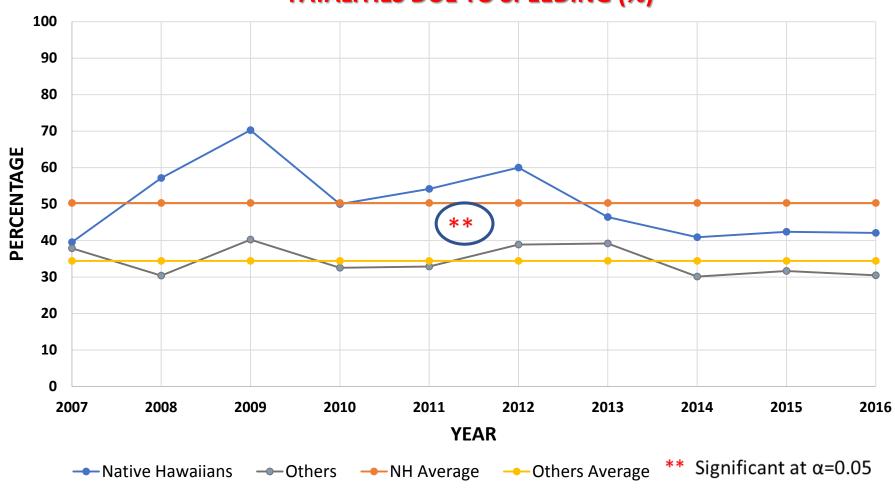


FATALITY ANALYSIS BASED ON SPEEDING





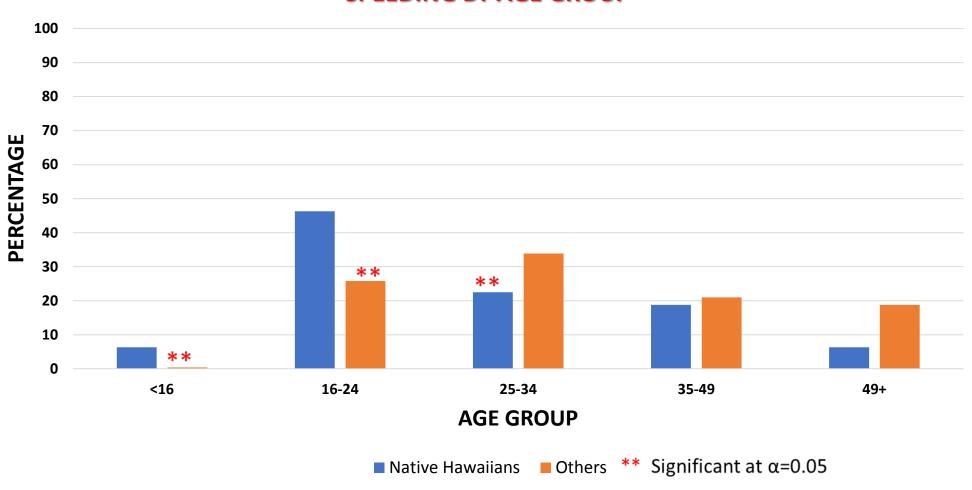
FATALITIES DUE TO SPEEDING (%)







SPEEDING BY AGE GROUP

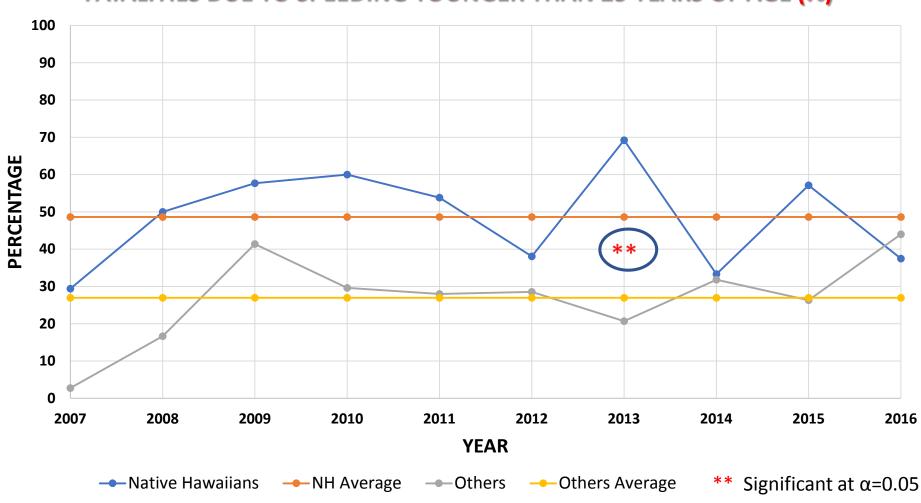


75% NH fatalities due to speeding in Hawaii are below the age of 35 and 50% below 25





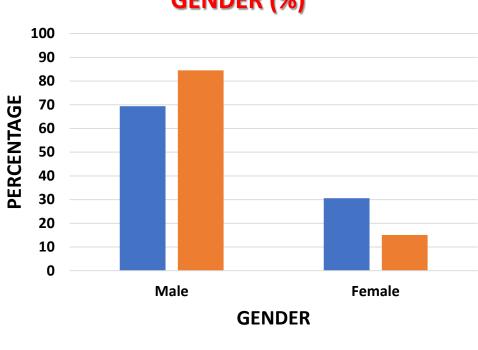
FATALITIES DUE TO SPEEDING YOUNGER THAN 25 YEARS OF AGE (%)





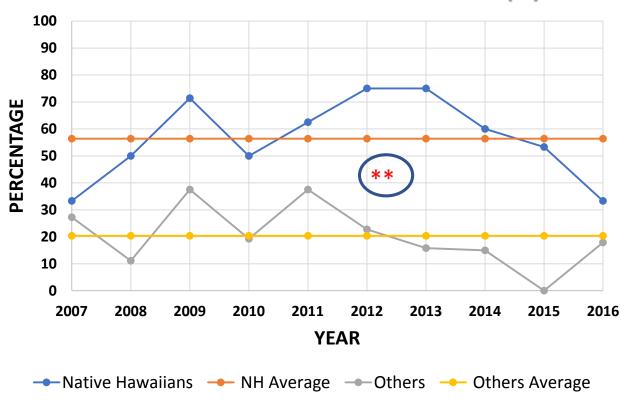








FEMALE FATALITIES DUE TO SPEEDING (%)



** Significant at α =0.05



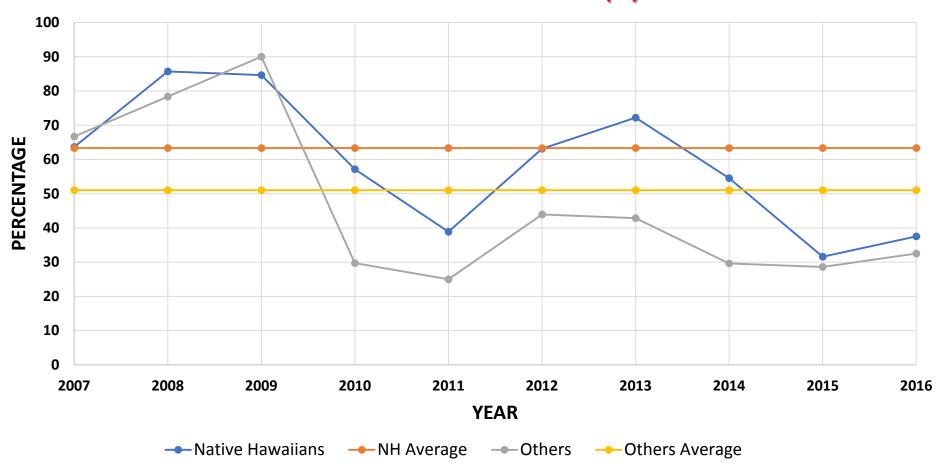


FATALITY ANALYSIS DUE TO NON-USAGE OF RESTRAINT





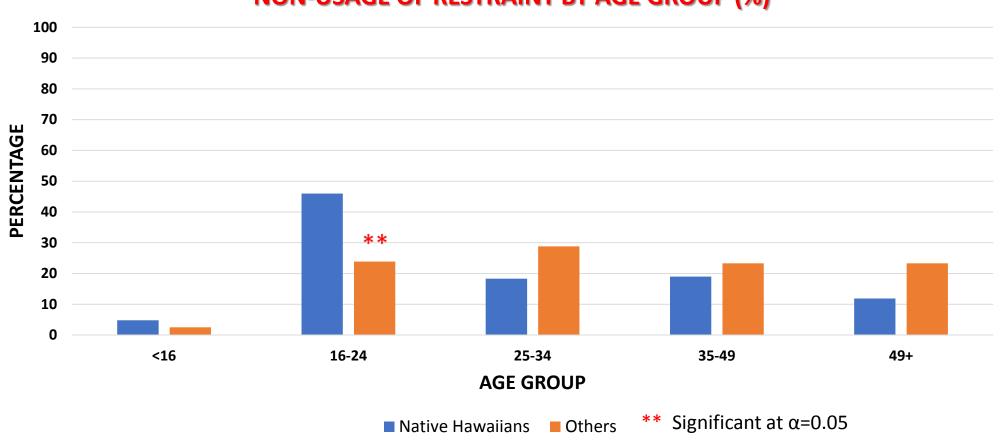
NON-USAGE OF RESTRAINT (%)







NON-USAGE OF RESTRAINT BY AGE GROUP (%)

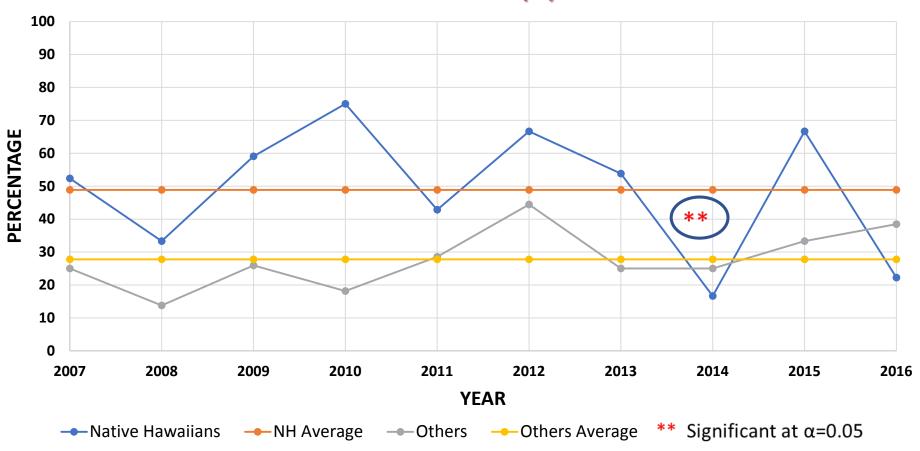


50% fatalities due to non-usage of restraint are below the age of 25 in NH whereas its only 25% in other races





FATALITIES DUE TO NON-USAGE OF RESTRAINT YOUNGER THAN 25 YEARS OF AGE (%)





MAJOR FINDINGS



- In Hawaii, almost 60% of the NH fatalities are younger than 35 years of age and 40% are younger than 25 years of age.
- Among the alcohol impaired fatalities in Hawaii, 69% NH are younger than 35 and 46% younger than 25
- 75% NH fatalities due to speeding in Hawaii are below the age of 35 and 50% below 25.
- 50% fatalities due to non-usage of restraint are below the age of 25 in NH community whereas its only 25% in other races.
- Female fatalities due to alcohol abuse and speeding is significantly higher in NH community than all other races.
- Fatalities of age group 50 and above is only 20% in NH whereas it is almost 43% in other races.





RECOMMENDATIONS

- Educational programs targeted for Native Hawaiian youths.
- Collaboration with Native Hawaiian leaders.
- Special traffic safety programs targeted for Native Hawaiians.





MAHALO!